

Appl. No. 09/730,877
Amdt. Dated February 23, 2005
Reply to Office action of December 28, 2004
Attorney Docket No. P08915-US2
EUS/J/P/05-3046

REMARKS/ARGUMENTS

Claim Amendments

No claims have been amended. Claims 1, 2, 4-13 and 15-26 are pending in the application. Favorable reconsideration of the application is respectfully requested in view of the following remarks.

Claim Rejections – 35 U.S.C. § 102(b)

Claims 1, 2, 4-10, 12, 13, 15-21, and 23-26 stand rejected under 35 U.S.C. 102(b) as being anticipated by Nokia Telecommunications OY (WO 98/32303 hereinafter Nokia). The Applicants respectfully traverse the rejection of these claims.

The Applicant's present invention discloses a system for handover of a mobile terminal from an SGSN (first SGSN) in a first network to an SGSN (second SGSN) in a second network without interrupting packet transmission and control signaling. A temporary connection (may be a Gb channel) between networks is created and maintained until the state (context) of the connection in the first network is transferred to the second network. At the same time, the first SGSN redirects packet transmission and control signaling to/from the second SGSN (page 6, lines 7-15) until the second SGSN sends a context forward acknowledgment signal to the first SGSN. Since context takeover from the first SGSN takes place when the temporary connection is in a standby state, risk for losing payload is minimized. After the context takeover by the second SGSN the direct connection between the first and second SGSN is released and payload traffic from the terminal is then communicated between a gateway SGN and the second SGSN without passing through the first SGSN. (Page 12, lines 9-19)

The Applicant respectfully directs the Examiner's attention to claim 1.

1. (Previously Presented) A method for handing over of a connection from a first serving GPRS support node (SGSN) to a second SGSN in response to an inter SGSN routing area update, the method comprising the steps of:
establishing a temporary leg between the first SGSN and the second SGSN;

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responsive to the connection entering a standby state, operating the first SGSN as a temporary anchor in response to the inter SGSN routing area update
finishing up ongoing transactions prior to moving context from the first SGSN to the second SGSN; and
redirecting packet transmission and control signaling to and from the second SGSN via the first SGSN via the temporary leg while the first SGSN is operating as the temporary anchor. (emphasis added)

The Applicant respectfully submits that the Nokia reference fails to disclose a number of the limitations recited in Applicant's claim 1.

The Nokia reference appears to disclose a method for updating a routing area in a packet radio network. A SGSN (new) detects a routing area update from a mobile station and initiates a temporary logical link to the MS utilizing the MS identifier contained in the routing area update. The temporary logical link in Nokia is established between the MS and the new SGSN. The new SGSN determines that routing area belongs to an old SGSN. The new SGSN contacts the old SGSN and requests the MM and PDP contexts for the MS.

The present invention establishes a temporary leg (connection) between the first (Nokia's old) SGSN and the second (Nokia's new) SGSN, where the first SGSN acts as a temporary anchor. The temporary leg is maintained until the state of the connection can be securely transferred (pages 6-7). In contrast to the present invention, Nokia establishes a temporary connection between the MS and the new SGSN. Also in contrast, as the temporary connection between the first SGSN and the second SGSN (Applicant's invention) enters a standby state, the context information can be transferred from and to the first SGSN and the second SGSN. Nokia discusses a standby state, but the standby state is associated with the MS and the new SGSN. The standby state of the Applicant's claim 1 is associated with the connection between the first and second SGSN.

A correspondence is drawn between ongoing transactions of the Applicant's invention and routing area update requests of the Nokia reference. The ongoing transactions of the Applicant's invention include more than just the narrow, routing area

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updates of the Nokia reference. For instance, the ongoing transactions of the Applicant's invention also include completing charging services (Page 7, lines 18-20).

A correspondence is also drawn between the temporary leg between the first and second SGSN of the Applicant's invention and the Nokia reference's retrieval of MM and PDP contexts in figure 3 (Nokia page 13 lines 5-15). In Nokia, a new SGSN determines that an MS belongs to another SGSN and the new SGSN requests the MM and PDP contexts. The stated intention of the temporary leg (connection) is to transfer contexts, but as noted above the transfer function is not limited to context transfers. Further, as noted above, the Nokia reference indicates a temporary connection but the temporary connection is a temporary logic link between the old SGSN and the MS, not between the old SGSN and the new SGSN, as in the Applicant's invention.

The Applicant's invention specifically initiates a temporary leg (connection) between the first and second SGSNs. The temporary leg, between the two SGSNs, remains connected until the second SGSN sends a context forward acknowledgment signal to the first SGSN and the takeover from the first SGSN takes place when the temporary connection is in a standby state.

Applicant respectfully submits that the Nokia reference fails to disclose a number of the limitations recited in Applicant's claim 1 and since claims 12 and 23 contain limitations similar to the limitations in claim 1, the Applicant respectfully requests withdrawal of the rejection of claims 1, 12 and 23. The Applicant respectfully submits that the respective dependent claims 2, 4-10, 13, 15-21 and 24-26 also contain the limitations of claims 1, 12 and 23. The Applicant respectfully requests the withdrawal of the rejection of the dependent claims as well.

Claim Rejections – 35 U.S.C. § 103 (a)

Claims 11 and 22 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Nokia in view of Nevo, et al. (US 6,320,873 B1 hereinafter Nevo). The Applicant respectfully traverses the rejection of these claims

The Nevo reference is cited for providing a step missing from the Nokia reference that is used for calculating bills and charges toward a MS in the GSM system. However,

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Nevo does not supply the missing limitations of installing a temporary leg between the first and second SGSMSs, moving context when the connection between the two SGSMSs enters a standby state and finishing up ongoing transactions.

Claims 11 and 22 depend from claims 1 and 12 respectively and recite further limitations in combination with the novel elements of claims 1 and 12. Therefore, the allowance of claims 11 and 22 is respectfully requested.

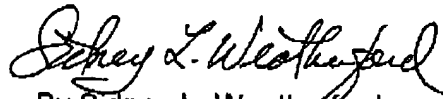
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CONCLUSION

In view of the foregoing remarks, the Applicant believes all of the claims currently pending in the Application to be in a condition for allowance. The Applicant, therefore, respectfully requests that the Examiner withdraw all rejections and issue a Notice of Allowance for all pending claims.

The Applicant requests a telephonic interview if the Examiner has any questions or requires any additional information that would further or expedite the prosecution of the Application.

Respectfully submitted,



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